WE CLAIM:

1. A method of determining a connection between a data emitting device and a network device which may carry the data, wherein the network device is comprised of a store for a data source address of a last frame transmitted to the network device and an input traffic count comprising:

(a) periodically reading the data source address,

(b) periodically reading the input traffic count,

(c) determining whether the data source address has always stayed the same,

(d) in the event the data source address has always stayed the same, determine whether the traffic count has exceeded a predetermined threshold,

(e) in the event the result of step (d) is true, indicate that the data source address identifies with acceptable probability a data emitting device directly connected to the network device.

2. A method as defined in claim 1, including:

(f) in the event the result of step (c) is false, indicate that a device identified by the data source address is directly connected to the network device.

3. A method as defined in claim 2 in which the store is an address resolution table of a communications routing device.